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PCN# : P2B3A
Issue Date : Feb. 07, 2013

DESIGN/PROCESS CHANGE NOTIFICATION

This is to inform you that a change is being made to the products listed below.

Unless otherwise indicated in the details of this notification, the identified change will have no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications. Products incorporating this change may be shipped interchangeably with existing unchanged products.

This change is planned to take effect in 90 calendar days from the date of this notification. Please work with your local Fairchild Sales Representative to manage your inventory of unchanged product if your evaluation of this change will require more than 90 calendar days.

Please contact your local Customer Quality Engineer within 30 days of receipt of this notification if you require any additional data or samples. Alternatively, you may send an email request for data, samples or other information to PCNSupport@fairchildsemi.com.

Implementation of change:

Expected First Shipment Date for Changed Product : May. 08, 2013

Expected First Date Code of Changed Product :1301

Description of Change (From) :
Original production route is
Maine fab with FSPM assembly.

Description of Change (To) :
Add 3 production routes of
Macronix fab with FSPM assembly,
Macronix fab with GTK assembly,
Maine fab with GTK assembly.

Reason for Change:
Increase production capacity.

Affected Product(s):

SMC0417		

Qualification Plan	Device	Package	Process	No. of Lots
QP2012051A	SMC0417	SOP8	MXIC Process D	1 to 3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Operating Life Test	115°C VDD=25V;HV=400V	JESD22-A108	1000 hrs	0/77(Note 1)
Solder Reflow Preconditioning	MSL1, PeakTemp (260°C), Cycles(3)	JESD22-A113F	168hrs	0/385(Note 2)
Temperature Humidity Bias Test	85°C,85%RH, VDD=17V;HV=50V	JESD22-A101	1000 hrs	0/231(Note 2)
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231(Note 2)
Unbiased Highly Accelerated Stress Test	110°C, 85%RH	JESD22-A102	264 hrs	0/231(Note 2)
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/231(Note 2)
Solderability	245°C	JESD22-B102	5 sec	0/33 (Note 2)
Resistance to Solder Heat	260°C	JESD22-B106	10 sec	0/15 (Note 2)

Qualification Plan	Device	Package	Process	No. of Lots
QP2012051A	SMC0417	SOP8	Maine FS50D	1 to 3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Operating Life Test	115°C VDD=25V;HV=400V	JESD22-A108	1000 hrs	0/77(Note 1)
Solder Reflow Preconditioning	MSL1, PeakTemp (260°C), Cycles(3)	JESD22-A113F	168hrs	0/385(Note 2)
Temperature Humidity Bias Test	85°C,85%RH, VDD=17V;HV=50V	JESD22-A101	1000 hrs	0/231(Note 2)
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231(Note 2)
Unbiased Highly Accelerated Stress Test	110°C, 85%RH	JESD22-A102	264 hrs	0/231(Note 2)
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/231(Note 2)
Solderability	245°C	JESD22-B102	5 sec	0/33 (Note 2)
Resistance to Solder Heat	260°C	JESD22-B106	10 sec	0/15 (Note 2)

Note 1: This device is qualified in Penang for both MXIC and Maine.

Note 2: The BOM, die size and fab process of SMC0417 is the same with FAN301, according to similarity rules of Fairchild Semiconductor Corporation it can be qualified by extension.

Conclusion: According to below additional information, SMC0417 can be qualified by extension and low risk if assembly in GTK.

Additional Information:

1. The BOM, die size and fab process of FAN301 and SMC0417 both the same and shown as below.

Classification		FAN301HLMY_F116	SMC0417
Assembly	Assembly Site	Greatek	Greatek
	Location	Taiwan	Taiwan
	Lead Frame	A-194 90x90mil	A-194 90x90mil
	Epoxy	Ablestik 8352L	Ablestik 8352L
	Die Coating	Hitachi PIX-8144	Hitachi PIX-8144
	Molding Compound	Sumitomo G600F	Sumitomo G600F
	Plating	Pure-Sn	Pure-Sn
Fab	Maine Process	FS50D	FS50D
	MXIC Process	D	D
Die Size	Maine Version	63.77*51.39 mil	63.77*51.39 mil
	MXIC Version	63.77*50.39 mil	63.77*50.39 mil